CONSERVATION COMMISSION 2003 Report of Accomplishments Professional Engineering Services Grants Program



Bill Language - Summary

The purpose of the Professional Engineering Services Grants Program is to enable conservation districts to hire Professional Engineers so that they may provide engineering services to private landowners, and engineering oversight to conservation district technicians.



Source of Funding

 \$1.5 million for the 2003-05 Biennium from the Water Quality Account

Distribution of 2003-05 Professional Engineering Services Grants

- Professional Engineering Task Force met in May 2003 to develop proposed policies for the 2003-05 Professional Engineering Services Grants Program. Policies were approved by the Conservation Commission at the May 15, 2003 meeting.
- Conservation districts cluster together for the purposes of the Professional Engineering Grants Program.
- For the 2003-05 Biennium, nine clusters have formed to service the state's 48 conservation district engineering needs.
- Each cluster is receiving a grant in the amount of \$161,666.
- Professional Engineering Services Grants are available only to conservation districts that demonstrate program and money management ability by meeting the Management Standards adopted by the Conservation Commission.

Grant Budgets:

Crane Baggie.	
Technical Assistance to Landowners	\$1,281,557
District Grant Administration	\$173,437
Commission Program Administration (½ FTE)	\$45,006
Total	\$1,500,000

Rollup of 9 Clusters' Accomplishments (07/01/03 through 12/31/03)

Total number of landowners to which engineering assistance was provided	253
Total number of cooperators who implemented BMPs	103
Total number of BMPs implemented	170
Total number small farm BMPs completed	43
Total number habitat restoration BMPs completed	63
Total number AFO/CAFO BMPs completed	46
Total number irrigation improvement BMPs completed	23
As a result of the BMPs completed, total number acres that will no longer contribute to surface or groundwater pollution	7,553.65 Acres
As a result of the BMPs completed, total number of stream miles protected, enhanced, or restored	30.90 Miles
Total grant amount spent	\$285,333.24
Amount of other funding leveraged with this funding	\$894,126.21

Individual Engineering Cluster 2003 Accomplishments

- <u>Central Klickitat Conservation District</u> (Administering District for the following cluster of districts: Benton, North Yakima, Eastern Klickitat and Underwood)
 - > Our cluster engineer provided engineering design for 7 districts in this grant cycle. Breakdown is as follows:
 - Kittitas CD prepared a design for Manastash Irrigation Diversion of a 40 cfs fish screen and fish passage weirs. Provided on-job training for district personnel, did a field survey, prepared design and construction plans for irrigation pipeline, diversion structure and fish screen box on 2 separate farms.
 - Central Klickitat CD provided design and construction support for Presher springs livestock water pipeline. Also provided survey and design of 2 other livestock water pipelines, and 1 livestock/wildlife watering pond. Began preliminary plan and cost estimate for Little Klickitat stream bank repair.
 - South Yakima CD provided field surveys and preliminary design for Buena Irrigation District.
 This project was withdrawn by Washington State for lack of funds.
 - North Yakima CD provided follow up design modifications for Ahtanum Ridge Business Park Stream Protection Project. Made field survey, design and modifications for Tree Top, Inc riparian enhancement project. Reviewed consultants report and provided guidance for surveys for Taylor Ditch Irrigation Diversion replacement, and other facets of this project.
 - Eastern Klickitat CD Provided survey, design and construction for 1 livestock water pipeline (10,000 feet long), began preparation for alternative plans and recommendations for design of road access creek crossing, guidance and estimate for wildlife pond, and provided design survey for and did hydrology analysis for Pine Creek stream bank repair.
 - Benton CD did reviews and analysis for 2 stream bank repairs, did preliminary design for fish screens and irrigation delivery pipeline and prepared feasibility design and cost estimate for fish passage through Meadow Springs County Club
 - Underwood Provided survey and layout for irrigation system improvement, and did review and inspection of spring development and pipeline for livestock watering system.
- <u>Kittitas County Conservation District</u> (Administering District for the following cluster of districts: Chelan, South Douglas, Foster Creek, and Okanogan)
 - > Hired a professional engineer.
 - Foster Creek Survey and Technical Assistance to the East Foster Creek Project; Survey and Technical Assistance on approximately one-hundred forty miles of stream in Douglas County to assist the Douglas County Watershed Planning efforts; With the voluntary efforts of three area cooperators, five weirs were installed on East Foster Creek to prevent further erosion of the upland floodplain at a rate of 15 feet per year. The weirs are positioned in increments that will allow the passage of resident fish.
- <u>Lewis Conservation District</u> (Administering District for the following cluster of districts: Clark, Cowlitz Wahkiakum, Pacific, and Grays Harbor)
 - > Hired a professional engineer.
 - Clark completed a topographic survey and conceptual plan for 5 miles of the Wind River, a 200-foot section of the Little Washougal River was surveyed for future design and restoration; survey and provided technical assistance to the Lower Columbia Fish Enhancement Group, Clark County, Fish First, Friends of the East Fork, and Lower Columbia Fish Recovery Board.
- Mason Conservation District (Administering District for the following cluster of districts: Jefferson, Kitsap and Clallam)
 - ➤ Provided Engineering Design and Construction oversight to replace 2 undersized (fish passage barrier) culverts with a 40' span, 2-lane bridge on a rural residential road. This project opened several miles of stream habitat to endangered salmon species. This project will also reduce flood frequency, thus improving water quality by keeping floodwaters from flowing through livestock pastures. Provided technical assistance to 7 waterfront landowners to restore riparian areas, improve fish habitat, reduce flood hazards, and improve water quality.

- ➤ Jefferson Design of salmon habitat improvement project on 0.6 miles of E. Chimacum Cr., in partnership with North Olympic Salmon Coalition; Oversight and assistance to CD staff on several small BMP related projects.
- Kitsap Our cluster engineer provides BMP designs for designated projects on small farms in Kitsap County; In FY03 the Olympic Cluster engineer provided the following design services to Kitsap CD:
 - 3 livestock waste storage structures and 4 waste storage structure roof designs
 - 3 stream bank stabilization design and 1 spring development project
 - 1 culvert replacement design and 3 livestock bridge crossings
- <u>Pierce Conservation District</u> (Administering District for the following cluster of districts: Thurston, King and Snohomish)
 - King Designed and installed 4 dairy manure lagoons to help dairy producers comply with the Dairy Nutrient Management Act; Designed fish screens to retrofit existing Drainage District pump station servicing local farming community; Provided permitting and design assistance to farmers on the development of fish friendly ditch maintenance plans.
 - Thurston Five major projects included design and installation of a livestock crossing bridge in the McLane area, roof design and installation of a dry stack manure storage structure in the Delphi Valley, a stream restoration project in the Tenino area, design of a tank for a dairy operation in Rochester, and design for stream restoration and culvert replacement on Perry Creek. Additional designs and consultation were provided for District technical staff.
 - ➤ Pierce Engineering work was done on the Mashel River Restoration and the Ohop Creek Restoration projects, major salmon recovery work in cooperation with the Nisqually Indian Tribe with this funding in 2003. Both projects have been rated top priority for restoration of endangered Nisqually River Chinook salmon.
- Skagit Conservation District (Administering District for the following cluster of districts: San Juan, Whidbey Island and Whatcom)
 - > Provided oversight for design, permits, & construction of earth-fill causeway & bridge replacement for fish passage.
 - Developed designs for a bridge for CREP access, controls for lowering beaver ponds, stock watering piping system to improve water quality.
 - Provided technical assistance to landowners on permit applications, monitoring of past projects, and the beginning of the watershed characterization study for water quality and fish habitat improvements for No Name Slough.
 - Provided technical oversight to district employees on projects.
 - San Juan Completed engineering consultation and analyses in support of restoration feasibility study for Port Stanley lagoon and salt marsh; Provided engineering and design support required to secure funding for initial phase of Deer Harbor estuarine restoration project on Orcas Island.
 - Whatcom Designed, managed, and supervised construction of 500 feet of new tributary, replacing a canary grass clogged ditch into which the Tenmile Creek had historically been diverted; Managed a stream habitat restoration project on private property that consisted of removing concrete fill from the channel of Tenmile Creek and replacing it with a fully spanning bridge; Completed a topographic and cross section survey of approximately one mile of Tenmile Creek; Provided survey and technical assistance to Lummi log jam project on the South Fork Nooksack.
- South Yakima Conservation District (Administering District for the following cluster of districts: Othello, Franklin, Warden, Moses Lake and Upper Grant)
 - Worked with 3 landowners and Ecology's Dam Safety division on concerns over a dam safety issues.
 - ➤ Designed and constructed manure collection pits (3), manure stack slabs (4), mechanical scrape system (1), waste storage pond (3), tailwater recovery system (1), solids settling basins (5), storm water runoff collection pipe (1), storm water runoff collection basin/pond (2).
 - > Assisted with SEPA review submittal on proposed new dairy construction near Mabton.

- Spokane Conservation District (Administering District for the following cluster of districts: Ferry, Stevens, Pend Oreille and Lincoln)
 - > Spokane Conservation District is the administering district for the NE Area engineer. Projects in 2003 were primarily in Ferry and Pend Oreille counties.
 - Ferry provided engineering designs for 7 cooperators. One lake restoration/habitat development, one river restoration/habitat development, and one stream re-channeling project were implemented with Best Management Practices (BMP) installed.
 - Ferry utilized private engineering contractors until the N.E. Area Association hired a District Engineer.
- Whitman Conservation District (Administering District for the following cluster of districts: Walla Walla, Columbia, Pomeroy, Asotin, Palouse, Palouse Rock Lake, Pine Creek and Adams)
 - Provided on-site technical assistance to 13 livestock owners, assisting to meet the Department of Ecology's water quality vague guidelines.
 - Design, management, and construction supervision of 4 landowners resulting in 4,250 ft of pipeline, 7 troughs, and 3,100 ft of fencing to be installed improving water quality by reducing access to the Snake River drainages.
 - ➤ Dedicated 132 hours towards EQIP planning for 4 District producers.
 - Adams received engineering assistance to develop a stream bank protection plan for one producer within the Palouse River watershed. One animal feeding operation received engineering assistance for sediment containment construction plans.
 - Columbia received engineering assistance for assessment of conveyance performance on the 3 irrigation diversions within the City of Dayton. Also worked with steering committees from each ditch to develop diversion alternatives to the traditional gravel push-up dams constructed, on an annual bases, to insure water delivery to the ditches. Assessed 1 private irrigation ditch conveyance performance.
 - Palouse Began passage barrier assessment on Wawawai Creek for increasing endangered Steelhead habitat. Working with Whitman County, US Army Corps of Engineers and WA Fish & Wildlife to pursue funding options for culvert replacement
 - Pomeroy We used our professional engineer, Lance Horning, in the engineering of 19 separate livestock watering systems funded under the CREP and CCRP programs. He worked in cooperation with NRCS personnel. We also used our engineer to conduct three irrigation efficiency studies on Pataha Creek.

Washington Conservation Districts assisting land managers with their conservation choices

